



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

The plan recommended is as follows: Charge a fire extinguisher in the usual manner with bi-carbonate of soda and sulphuric acid; add to the water one spoonful of crude carbolic acid to every eight gallons of water. Apply this to the tree and the force from the extinguisher will convey the fluid to all parts of the tree alike; the disposition of the insects to settle upon the lower surface of the leaf and limb serve to further this plan. Two applications should be made upon the same tree; the first, three weeks after first deposition of eggs, and the second, four weeks from the first application. If the work is delayed the insects become strong and the strength of the solution must be increased, which would be liable to injure the tree itself. The actual cost is not exceeding twenty cents an application, which is trifling compared to the cost of replacing the tree. That the experiment may prove successful it is necessary to make the work thorough throughout a locality, since in a short time they return from the infested trees.

Examining the male *L. acericorticis* since my previous article, I find my doubts confirmed with reference to the non-existence of the two halteres or balancers in the place of lower wings. After close examination with a high power and living specimens, I fail to find them, and conclude that in this species they do not exist, or if at all, in a rudimentary state.

M. V. Signoret states that when the male *Lecanium* is prepared to come out it lifts that membrane which rests slightly fixed by the head end. Observation with this species shows this is not reliable with all *Lecania*. When the male of this species is about to emerge from the larval scale, it backs out with the wings closely adhering to the body. The empty scales will, upon examination, be found closely attached to the leaf or limb at the head end, while at the opposite end it is loosened.

—:o:—

RECENT LITERATURE.

MACALISTER'S ZOÖLOGY OF THE VERTEBRATES.¹—This little manual is chiefly concerned with the morphology of the classes and orders of vertebrate animals, with slight, condensed references to their habits, physiology and classification, but with no chapters treating of their zoö-geographical distribution, or geological suc-

¹ *Zoölogy of the Vertebrate Animals*. By ALEX. MACALISTER, M.D. Specially revised for American Students, by A. S. PACKARD, JR., M.D. New York, Henry Holt & Co., 1878. 12mo, pp. 134, with 59 figures.

cessors, or their relations to lower forms of life, or to their environment; nor is anything said regarding the mode of development of these animals. However, as a compact, concise, clearly written and useful manual of the morphology of vertebrates, it is well adapted for the use intended by the author, viz: "To present in as clear a form as possible the leading characters of vertebrate animals." As such we recommend its use in colleges and high schools, and to the general reader, though in these days the latter class of book buyers desire, as a rule, a book combining morphology and biology, with general views of the relation of animals to their surroundings, as well as their relations to fossil forms. It should, however, in justice be said, that all this could not be contained in a book of the size of the present one.

While we have no fault to find with the matters of detail, we would suggest that in the light of recent discoveries, it is old-fashioned and unphilosophical to regard the fourteen groups of carinate birds as "orders."

The wood-cuts are from well selected subjects, and are, with scarcely an exception, excellent, while the paper, press-work and binding render this little hand-book, like others of the series, both attractive and convenient.

FOSTER AND LANGLEY'S *ELEMENTARY PRACTICAL PHYSIOLOGY*.¹—This well known book, so useful to students of anatomy, histology and physiology, has passed to a third edition, which differs from the preceding one chiefly by the introduction of a lesson on the structure of the ear, and by some additions to the lessons on the connective tissues. As it now stands the book is indispensable for medical students, and for biologists who have used Huxley and Martin's *Biology* and desire to extend their studies to histology and physiology. Its extensive use among naturalists is most desirable; to draw them away from "skin and bone" as well as systematic zoölogy, to a study of the living organism, and thus ultimately to the more general relations of animals to each other and their environment.

IHERING'S *PERIPHERAL NERVE-SYSTEM OF VERTEBRATES*.²—This elaborate essay treats of the following subjects: The peripheral system of nerves as regards the knowledge of the formation of regions in the vertebral column; the idea of segments in the vertebrates and invertebrates; a general phylogeny of the peripheral nerve-system and the formation of regions of the vertebral column. The chapters on these subjects are followed by a special account of these nerves in the different

¹*A Course of Elementary Practical Physiology*. By M. FOSTER, M.D., F.R.S.; assisted by J. N. Langley, B.A. Third edition. London, Macmillan & Co., 1878. 12mo, pp. 276.

²*Das Peripherische Nervensystem der wirbelthiere als Grundlage für die Kenntniss der Regionenbildung der Wirbelsäule*. Von HERMANN VON IHERING. Mit 5 tafeln und 36 holzschnitten. Leipzig, Verlag von F. C. W. Vogel, 1878. 4.o, pp. 238.